Serial No. 10/665,564 Docket No. YOR920030126US1 Ref. No. YOR.447

## **AMENDMENTS TO THE CLAIMS:**

## Please amend the claims as follows:

1. (currently amended) A method of <u>developing</u> refactoring a plurality of actual resources without alteration into a collection of virtual resources customized to a particular audience, said method comprising:

constructing at least one virtual resource independent of an actual resource; connecting the at least one actual resource to the at least one virtual resource; retrieving the at least one virtual resource; and extracting at least one descriptor from said at least one retrieved virtual resource.

- 2. (original) The method of claim 1, wherein said connecting comprises directly mapping the at least one actual resource to the at least one virtual resource.
- 3. (original) The method of claim 1, wherein the constructing comprises at least one of: renaming a method; hiding a method; composing a method; renaming an attribute; hiding an attribute; composing an attribute; assigning to at least one domain; designating as a collection; assigning to at least one validator; assigning a description; designating as at least one of ready and not ready; and assigning a last modified date and time.
- 4. (currently amended) The method of claim 1, wherein said at least one virtual resource comprises a plurality of virtual resources and said virtual resources are connected to each other through a relationship carrying semantic that can be leveraged by a consumer of resources, said method further comprising: constructing at least one virtual relationship between at least two virtual resources; coupling at least one actual relationship implementor to at least one virtual relationship; performing at least one retrieval of a virtual relationship; and extracting at least one descriptor from at least one retrieved virtual relationship.
- 5. (original) The method of claim 4, wherein said coupling comprises: directly mapping said at least one actual relationship implementor to said at least one virtual

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relationship.

- 6. (currently amended) The method of claim 4, wherein the relationship constructing comprises at least one of: assigning a root virtual resource name; assigning a target virtual resource name; assigning a relationship name; assigning a relationship type; assigning a description; assigning a target instance naming scheme; designating as at least one of ready and not ready; and assigning a last modified date and time[[;]].
- 7. (original) The method of claim 4, wherein the retrieving comprises locating virtual relationships by at least one of: a domain; a name; a root; a type; and a target.
- 8. (currently amended) The method of claim 1, wherein virtual resources are connected to each other through a model flattening relationship with a semantic meaning of reachability, said method further comprising: constructing at least one virtual relationship between at least two virtual resources; coupling at least one actual relationship implementor to at least one virtual relationship; performing at least one retrieval of a virtual relationship; and extracting at least one descriptor from at least one retrieved virtual relationship.
- 9. (original) The method of claim 8, wherein said coupling comprises: directly mapping said at least one actual relationship implementor to said at least one virtual relationship.
- 10. (currently amended) The method of claim 8, wherein the relationship constructing comprises at least one of: assigning a root virtual resource name; assigning a target virtual resource name; assigning a relationship name; assigning a relationship type; assigning a description; assigning a target instance naming scheme; designating as at least one of ready and not ready; and assigning a last modified date and time[[;]].
  - 11. (original) The method of claim 1, wherein the retrieving comprises locating

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virtual resources by at least one of: a domain; a name; and a relationship.

- 12. (currently amended) The method of claim 8, wherein the retrieving comprises locating virtual relationships by at least one of: a domain; a name; a root; a type; and a target.
- 13. (currently amended) The method of claim 2, wherein the descriptor validator information is employed to limit actual resource usage.
- 14. (currently amended) A system for <u>developing refactoring a plurality of actual</u> resources without alteration into a collection of virtual resources customized to a particular audience, said system comprising:

means for constructing at least one virtual resource <u>independent of at least one actual</u> <u>resource</u>;

means for connecting at least one actual resource to at least one virtual resource; means for retrieving <u>said</u> at least one virtual resource; and means for extracting at least one descriptor from said at least one retrieved virtual resource.

- 15. (original) The system of claim 14, wherein said means for connecting comprises means for directly mapping the at least one actual resource to the at least one virtual resource.
- 16. (original) The system of claim 14, wherein the means for constructing performs at least one of: renaming a method; hiding a method; composing a method; renaming an attribute; hiding an attribute; composing an attribute; assigning to at least one domain; designating as a collection; assigning to at least one validator; assigning a description; designating as at least one of ready and not ready; and assigning a last modified date and time.
- 17. (original) The system of claim 14, wherein virtual resources are connected to each other through a relationship carrying semantic that can be leveraged by a consumer of

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resources, comprising means for constructing at least one virtual relationship between at least two virtual resources; means for coupling at least one actual relationship implementor to at least one virtual relationship; means for performing at least one retrieval of a virtual relationship; and means for extracting at least one descriptor from at least one retrieved virtual relationship.

- 18. (original) The system of claim 17, wherein said means for coupling comprises: means for directly mapping said at least one actual relationship implementor to said at least one virtual relationship.
- 19. (currently amended) The system of claim 17, wherein the means for constructing at least one virtual relationship performs at least one of: assigning a root virtual resource name; assigning a target virtual resource name; assigning a relationship name; assigning a relationship type; assigning a description; assigning a target instance naming scheme; designating as at least one of ready and not ready; and assigning a last modified date and time[[;]].
- 20. (original) The system of claim 14, wherein the means for retrieving performs locating virtual relationships by at least one of: a domain; a name; a root; a type; and a target.
- 21. (currently amended) The system of claim 14, wherein virtual resources are connected to each other through a model-flattening relationship with semantic meaning of reachability, said system further comprising: means for constructing at least one virtual relationship between at least two virtual resources; means for coupling at least one actual relationship implementor to at least one virtual relationship; means for performing as least one retrieval of a virtual relationship; and means for extracting at least one descriptor from at least one retrieved virtual relationship.
  - 22. (original) The system of claim 21, wherein said means for coupling comprises:

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means for directly mapping said at least one actual relationship implementor to said at least one virtual relationship.

- 23. (currently amended) The system of claim 21, wherein the means for constructing a relationship comprises at least one of: means for assigning a root virtual resource name; means for assigning a target virtual resource name; means for assigning a relationship name; means for assigning a relationship type; means for assigning a description; means for assigning a target instance naming scheme; means for designating as at least one of ready and not ready; and means for assigning a last modified date and time[[;]].
- 24. (original) The system of claim 21, wherein the means for retrieving comprises locating virtual resources by at least one of: a domain; a name; and a relationship.
- 25. (original) The system of claim 21, wherein the means for retrieving comprises locating virtual relationships by at least one of: a domain; a name; a root; and a target.
- 26. (currently amended) The system of claim 15, wherein the descriptor validator information is employed to limit actual resource usage.
- 27. (currently amended) In a system comprised of a plurality of actual resources, a service to manage descriptions of said actual resources, said service comprising:

defining at least one virtual domain to satisfy a <u>user-requirements</u> requirement analysis; and

defining at least one virtual resource describing as least one actual resource within the at least one virtual domain to satisfy the <u>user-requirements</u> requirement analysis.

28. (currently amended) The service of claim 27, further comprising: analyzing a requirement for actual resource usage, to provide said <u>user requirement requirements</u> analysis.

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- 29. (original) The service of claim 27, further comprising: defining at least one virtual relationship between at least two virtual resources.
- 30. (currently amended) The service of claim 29, wherein at least one of a virtual resource and a virtual relationship are is utilized to create an application program.
- 31. (currently amended) A method of deploying computing infrastructure in which computer-readable code is integrated into a computing system, such that said code and said computing system combine to perform a method of refactoring developing said actual resources without alteration into a collection of virtual resources customized to a particular audience, said method comprising:

constructing at least one virtual resource independent of said actual resources; connecting at least one actual resource to at least one virtual resource; performing at least one retrieval of a virtual resource; and extracting at least one descriptor from said at least one retrieved virtual resource.

32. (currently amended) A signal-bearing computer-readable medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method of refactoring developing said actual resources without alteration into a collection of virtual resources customized to a particular audience, said method comprising:

constructing at least one virtual resource <u>independent of said actual resources</u>; connecting at least one <u>of said</u> actual <u>resources</u> resource to <u>said</u> at least one virtual resource;

performing at least one retrieval of [[a]] said virtual resource; and extracting at least one descriptor from said at least one retrieved virtual resource.

33. (currently amended) A method of <u>developing refactoring</u> actual resources without alteration into a collection of virtual resources customized to a particular audience, <u>said</u>

## method comprising:

constructing at least one virtual resource independent of an actual resource; and providing in the at least one virtual resource a structured meta-data layer which contains semantic information for leveraging by a consumer of the virtual resources.

- 34. (original) The method of claim 33, wherein said semantic information includes relationships with agreed upon semantics including any of "related-to", "contains", and "isconflicting-with", between entities.
- 35. (currently amended) The method of claim 33, wherein said semantic information allows any of making new resource manipulation operations available to logic authoring tools and serving as an input to a conflict detection tool.
- 36. (original) The method of claim 1, further comprising: creating at least one virtual resource instance; assigning an identity to the at least one virtual resource instance; and associating the at least one virtual resource instance with one virtual resource.
- 37. (original) The method of claim 4, further comprising: creating at least one virtual relationship instance; assigning an identity to the at least one virtual relationship instance; and associating the at least one virtual relationship instance with one virtual relationship.